(3) The epochs of maximum and minimum temperatures are retarded as the altitude increases.

(4) The differences of temperature from day to day can be larger at 7,000 or 8,000 meters altitude than those experienced at the same time near the ground.

(5) Temperature decreases far more rapidly in the neighborhood of a center of depression than elsewhere; this decrease can in certain cases amount to 0.9° C. per 100 meters.

(6) In a large number of areas of high pressure, but not in all, the diminution of temperature goes on as follows: From the ground up to 1,500 meters or 2,000 meters the temperature changes but little and often rises, after which it commences to diminish normally, and finally at 9,000 or 10,000 meters the gradient is about 1° per 100 meters. If we compare these facts with those that occur in areas of low pressure, we see that a vertical gradient has the following characteristics: The lower parts of barometric depressions, are often warmer than those of the areas of high pressure; after ascending a few hundred meters, within the area of low pressure, the rapid diminution brings us to temperatures that are lower than in the area of high pressure. Thus, the central part of a depression as at 3,000 or 4,000 meters altitude is ordinarily colder than the corresponding part of an area of maximum pressure. This fact had already been shown by Hann, but the sounding balloons, while confirming this first result, show that still higher up the temperatures again tend toward equality, which is a very important consideration in determining the forms of the upper isobars.

Similar conclusions based on more accurate observations, are also given in the great work of Assmann and Berson Wissenschaftliche Luftfahrten, 3 volumes, Braunschweig, 1900.

ERRATA.

In the MONTHLY WEATHER REVIEW for March, 1901, p. 122, please strike out under the heading "errata" the last item: "line 25 from bottom, for 530° read 562°." The original text was correct.

Prof. F. Pockels has sent us the following corrections to his article on "The theory of the formation of precipitation on mountain slopes" in the current number of the REVIEW; but, unfortunately, they were received too late to be incorporated in the text:

Page 156, column 2, line 8 from the bottom, for "$x = -6.3$," read "$x = -1.3$."

Page 157, column 2, right-hand side of the second equation from bottom, for $\frac{1}{q}\left(e^{\frac{q\eta}{2}} - e^{-\frac{qn}{2}}\right)$

read $\frac{1}{q}\left(e^{\frac{q\eta}{2}} - e^{-\frac{q\eta}{2}}\right)$.

THE WEATHER OF THE MONTH.

By ALFRED J. HENRY, Professor of Meteorology

CHARACTERISTICS OF THE WEATHER FOR APRIL.

April, 1901, was characterized by unusually high pressure in the Lake region and over New England, a heavy rainfall along the Appalachians and eastward to the Atlantic, high temperatures over the northern third of the country, and cold weather in the South Atlantic and Gulf States. Precipitation was also in excess of the normal in the Rocky Mountain region and over the major portion of the southern Plateau, as was the case in the corresponding month of 1900.

Heavy snow, mixed with rain, fell along the Appalachians and in the upper Ohio Valley on the 20th and 21st, causing floods in the Allegheny and upper Ohio rivers during the latter part of the month.

Another striking characteristic of the month was the absence of thunderstorms and violent local storms. The number of thunderstorms that occurred in April, 1900, was 2,617; less than a tenth of that number was reported during the current month.

Interlake navigation began about April 8, but owing to a heavy ice gorge which formed at the foot of Lake Huron, passage into or out of that lake at its southern end was effectively blocked until the 26th of the month.

PRESSURE.

The distribution of monthly mean pressure is graphically shown on Chart IV and the numerical values are given in Tables I and VI.

The most striking feature in the distribution of mean pressure is the apparent shifting eastward of the area of high pressure which in a normal month is found over the Dakotas and the Northwest and the absence of the ridge of high pressure that usually extends from the south Atlantic coast northwestward to the Dakotas. Owing to the persistence of areas of low pressure along the Atlantic coast, monthly mean pressure was least off Chesapeake Bay, with mean values of 29.94 inches. As compared with the preceding month, pressure rose about a quarter of an inch in the upper Lake region and as much as three-tenths of an inch over the mouth of the St. Lawrence. There was a fall in monthly mean pressure over the Plateau region and also over the South Atlantic States, the greatest fall being a little more than a tenth of an inch. It was also below normal along the middle and south Atlantic coasts and in the Plateau region. Pressure was largely in excess of the normal over New England, the Canadian Maritime Provinces, the Lake region, and also along the Pacific coast.

TEMPERATURE OF THE AIR.

The distribution of monthly mean surface temperature, as deduced from the records of about 1,000 stations, is shown on Chart VI.

The month was cold and backward in the South Atlantic States, the Ohio Valley, the lower Mississippi Valley, and the Southwest. The greatest negative departures, viz, 6° to 8° daily, were recorded in South Carolina, northern Georgia, and western North Carolina. The month was warmer than usual in New England and thence westward to the upper Missouri Valley, positive departures of 7° being registered in portions of that region. Temperature was below normal west of the Rocky Mountains and over the middle and southern slopes. Maximum temperatures of 100° were recorded in the lower Rio Grande Valley and in Arizona and the desert